1. A 3-month-old infant presents with cough, tachypnea, chest indrawing, and wheeze. RSV test is positive. What is the most likely diagnosis?
   a. Asthma
   b. Croup
   c. Bronchiolitis
   d. Pneumonia
   e. Pertussis
2. A 4-year-old has barking cough, inspiratory stridor, and hoarse voice after a viral illness. Symptoms worsen at night. Diagnosis?
   a. Epiglottitis
   b. Croup
   c. Bronchiolitis
   d. Bacterial tracheitis
   e. Asthma
3. A child presents with high fever, drooling, muffled "hot potato" voice, and sits leaning forward. What is the most likely diagnosis?
   a. Croup
   b. Bronchiolitis
   c. Epiglottitis
   d. Pertussis
   e. Asthma
4. A 10-month-old presents with fever, tachypnea, grunting, and decreased air entry on the right side. CXR shows lobar consolidation. Diagnosis?
   a. Viral pneumonia
   b. Bronchiolitis
   c. Bacterial pneumonia
   d. Croup
   e. Asthma
5. A 2-year-old has sudden onset choking while playing with small toys. Unilateral decreased air entry is noted. What is the most likely cause?
   a. Pneumonia
   b. Asthma
   c. Foreign body aspiration
   d. Bronchiolitis
   e. Croup
6. A child with pneumonia develops respiratory distress and hyperresonance on percussion. Breath sounds are absent on one side. What is the likely complication?
   a. Pleural effusion
   b. Empyema
   c. Pneumothorax
   d. Bronchiolitis
   e. ARDS
7. A 7-year-old with atopy develops recurrent wheeze, nighttime cough, and shortness of breath. PEFR improves after inhaled bronchodilator. Diagnosis?
   a. COPD
   b. Asthma
   c. Croup
   d. Bronchiolitis
   e. Pneumonia
8. A 2-week-old infant has tachypnea, nasal flaring, retractions, and cyanosis. CXR shows reticulogranular

pattern with air bronchograms. Diagnosis?

a. Meconium aspiration
b. Neonatal pneumonia
c. Respiratory distress syndrome
d. Transient tachypnea of newborn
e. Congenital diaphragmatic hernia

9. **A premature neonate develops respiratory distress at birth. CXR shows fluid in fissures and hyperinflation. Condition resolves in 48 hours. Diagnosis?**

a. RDS
b. TTN
c. Pneumonia
d. MAS
e. ARDS

10. **A 1-year-old with fever, cough, *and decreased breath sounds has a shift of the trachea to the opposite side. What is likely?***

a. *Lung collapse*
b. *Pleural effusion*
c. *Pneumonia*
d. *Asthma exacerbation*
e. *Bronchiolitis*

11. **A 9-year-old presents with chronic cough, nasal polyps, foul-smelling stools, and failure to thrive. What condition is most likely?**

a. Asthma
b. Cystic fibrosis
c. Tuberculosis
d. Bronchiectasis
e. Allergic rhinitis

12. **A child with pneumonia continues to have fever after 7–10 days, with worsening respiratory distress. CXR shows loculated fluid. Diagnosis?**

a. Simple pleural effusion
b. Empyema
c. Pneumothorax
d. Atelectasis
e. Bronchiolitis

13. **A child has chronic cough, recurrent lung infections, and digital clubbing. CXR shows tram-track appearance. Diagnosis?**

a. Asthma
b. Cystic fibrosis
c. Tuberculosis
d. Bronchiectasis
e. Bronchiolitis

14. **A school-aged child presents with low-grade fever, dry cough, and crepitations. CXR shows bilateral interstitial infiltrates. Most likely organism?**

a. Strep pneumoniae
b. RSV
c. Staph aureus
d. Mycoplasma pneumoniae
e. H. influenzae

15. **A 3-year-old has whooping cough, post-tussive vomiting, and paroxysmal cough. What is the likely diagnosis?**

a. Croup
b. Pertussis
c. Asthma
d. Viral bronchitis
e. Bronchiolitis

16. **A baby born to a diabetic mother has immediate respiratory distress, grunting, and requires oxygen. CXR: ground-glass appearance. What is the most likely cause?**

a. Bronchiolitis

b. RDS due to surfactant deficiency
c. Meconium aspiration
d. Pneumonia
e. Pulmonary edema

17. **A 3-year-old presents with inspiratory stridor, high fever, and toxic appearance. He does not have barking cough. Diagnosis?**
a. Croup
b. Epiglottitis
c. Laryngomalacia
d. Foreign body aspiration
e. Bronchiolitis

18. **A child has a productive cough, weight loss, low-grade fever, and hilar lymphadenopathy on CXR. What is the most likely diagnosis?**
a. Asthma
b. Tuberculosis
c. Pneumonia
d. Cystic fibrosis
e. Bronchiectasis

19. **A toddler with fever and cough has dullness to percussion, decreased breath sounds, and meniscus sign on CXR. What is the likely diagnosis?**
a. Pneumothorax
b. Pleural effusion
c. Asthma
d. Bronchiolitis
e. Lung collapse

20. **A 6-month-old develops severe respiratory distress with subcostal retractions. Nasal swab positive for RSV. What is the first-line treatment?**
a. Steroids
b. Antibiotics
c. Nebulized epinephrine
d. Supportive care (oxygen + hydration)
e. Bronchodilators

21. **A 64-year-old man with hypertension and smoking history presents with chest tightness for 3 days, occurring even at rest. ECG shows horizontal ST-depression in V4–V6, and troponins are normal. BP is 150/90, HR 102. Which is the MOST appropriate next step in management?**
a. Discharge with oral nitrates
b. Start fibrinolysis
c. Start dual antiplatelet therapy and anticoagulation
d. Immediate PCI
e. Start beta-blocker only

22. **A 55-year-old woman presents 45 minutes after sudden severe chest pain radiating to the left arm. ECG shows ST elevation in leads II, III, aVF. Her hospital has no PCI facilities for 3 hours. Next best step?**
a. Give clopidogrel only
b. Immediate fibrinolysis
c. Wait for PCI
d. Give IV nitrates
e. CT angiography

23. **A patient with inferior STEMI develops HR 38/min, BP 92/60, JVP elevated. ECG shows complete heart block. First-line management?**
a. IV adenosine
b. Atropine
c. Dopamine infusion
d. Immediate transvenous pacing
e. Amiodarone IV

24. **A 60-year-old man develops sharp pleuritic chest pain 3 days after MI. Pain improves**

on sitting forward. ECG shows diffuse ST elevation.Best treatment?

a. High-dose aspirin
b. Steroids
c. Morphine
d. Fibrinolysis
e. Heparin

25.A 58-year-old man has exertional angina relieved by rest. Stress test reveals ischemia. He has asthma.Best antianginal agent?

a. Non-selective beta-blocker
b. Cardioselective beta-blocker
c. Calcium channel blocker
d. Ivabradine
e. Nitrate patch only

26. A patient with chronic stable angina on aspirin, statin, beta-blocker, nitrate still has symptoms.Next drug to add?

a. Ranolazine
b. Digoxin
c. Furosemide
d. Clopidogrel
e. Hydralazine

27. A 72-year-old patient presents with acute breathlessness, orthopnea, frothy sputum, BP 170/100, crackles up to mid-zones.Most appropriate initial treatment?

a. IV fluids
b. IV frusemide + nitrates + O2
c. Beta-blocker increase
d. Oral ACE inhibitor only
e. Digoxin IV bolus

28. A 60-year-old diabetic patient with EF 30% is NYHA III despite ACE inhibitor and beta-blocker.

Which drug reduces mortality next?

a. Digoxin
b. Spironolactone
c. Furosemide
d. Nifedipine
e. Amiodarone

29.A 72-year-old hypertensive woman with preserved EF presents with dyspnea and edema. Echo: EF 60%, concentric LVH.Key management?

a. Increase fluid intake
b. Aggressive diuresis + BP control
c. Give digoxin
d. Give ACE inhibitor only
e. Start inotropes

30. A man post-MI has BP 70/40, cold peripheries, S3 gallop, oliguria.Best immediate therapeutic step?

a. High-dose diuretics
b. IV nitrates
c. Inotropic support
d. Beta-blocker bolus
e. Fluid restriction

31. A 45-year-old man with severe tearing chest pain radiating to back, unequal arm BPs, widened mediastinum.Best first step?

a. Give thrombolysis
b. Start IV labetalol
c. Start IV fluids
d. Coronary angiography
e. CT scan with contrast

32. A smoker complains of calf pain after walking 100 meters, diminished dorsalis pedis pulses. ABI is 0.6. Best initial management?

a. Amputation
b. ACE inhibitors
c. Smoking cessation + exercise program
d. High-dose steroids
e. Long-term anticoagulation

33. A 70-year-old diabetic presents with leg pain, non-healing foot ulcer, ABI 0.3.Preferred management?

a. Lifestyle modification
b. Aspirin only
c. Revascularization
d. Compression stockings
e. Arterial Doppler only

34. A 50-year-old postoperative patient has unilateral leg swelling, tenderness, positive Homan sign. Ultrasound confirms DVT.Initial treatment?

a. Aspirin
b. Low molecular weight heparin
c. Compression bandage only
d. IV fluids
e. Antibiotics

35. A 40-year-old man with sudden dyspnea, pleuritic pain, tachycardia, and D-dimer positivity. CTPA unavailable. Wells score high.Next best step?

a. Send home
b. Start empiric anticoagulation
c. CT abdomen
d. Give diuretics
e. Antibiotics

36.A 45-year-old woman with aching legs, dilated tortuous veins, worse on standing. Duplex shows incompetent saphenofemoral valve.

Best management?

a. Immediate surgery
b. Compression stockings + elevation
c. Aspirin
d. Diuretics
e. LMWH

37. A 62-year-old man presents with sudden painful, pale, pulseless, cold left leg. Duration 2 hours.Immediate management?

a. Oral anticoagulant
b. IV heparin
c. Compression therapy
d. Oral aspirin only
e. Observe for 24 hours

38. A patient with BP 220/130, severe dyspnea, basal crackles.Best immediate drug?

a. Hydralazine
b. Sodium nitroprusside
c. IV labetalol
d. Nifedipine sublingual
e. Metoprolol bolus

39.A 38-year-old with malignancy presents with hypotension, raised JVP, muffled heart sounds. Pulsus paradoxus present. Immediate step?

a. IV diuretics
b. Pericardiocentesis
c. Beta-blocker
d. High-flow oxygen only
e. Start antibiotics

40. A 28-year-old woman has dyspnea, opening snap, diastolic rumble, AF on ECG.Best next step?

a. Nitrates
b. Beta-blocker + anticoagulation
c. ACE inhibitor

d. Digoxin only
e. Immediate valve replacement

11. A patient with acute rapid AF (HR 160), stable BP. Echo normal EF. First-line rate control?

a. Adenosine
b. Amiodarone
c. Metoprolol or diltiazem
d. Digoxin IV
e. Electrical cardioversion immediately

12. A 60-year-old with palpitations, BP 120/80, ECG shows wide complex regular tachycardia. Next step?

a. Adenosine
b. Amiodarone IV
c. Immediate cardioversion
d. Beta-blocker bolus
e. Atropine

13. A patient with CKD presents with muscle weakness, ECG shows peaked T waves and widened QRS. K+ = 6.8.Immediate treatment?

a. Insulin + dextrose
b. Loop diuretic
c. Calcium gluconate IV
d. Kayexalate only
e. Dialysis only

14. An 82-year-old with syncope on exertion, harsh systolic murmur radiating to carotids, slow rising pulse. Echo shows valve area 0.7 cm^2.Definitive treatment?

a. ACE inhibitors
b. PCI
c. Aortic valve replacement
d. Beta-blockers
e. Nitrates

15. A 45-year-old IV drug user has fever, new murmur, splinter hemorrhages, +ve blood culture for Staph aureus. Echo shows vegetation on tricuspid valve. Best initial antibiotic therapy?

a. Oral doxycycline
b. IV flucloxacillin ± gentamicin
c. Oral ciprofloxacin
d. Azithromycin
e. Metronidazole

46.A 13-year-old boy presents with fever for 5 days, migratory pain and swelling involving the knees and ankles, and increasing shortness of breath. He had a sore throat 3 weeks earlier, but did not seek treatment. On examination, his temperature is 38.3°C, heart rate 120/min, and a pansystolic murmur best heard at the apex radiating to the axilla. His left knee and right ankle are swollen, warm, and tender. Which of the following is the most appropriate diagnosis?

a. Definite acute rheumatic fever
b. Possible acute rheumatic fever
c. Post-viral polyarthritis
d. Reactive arthritis
e. Systemic lupus erythematosus

47.A 12-year-old girl presents with fever for one week, migratory arthritis, and a new pansystolic murmur consistent with mitral regurgitation. ECG shows a prolonged PR interval. Her ASO titer is elevated. Echocardiography confirms carditis without heart failure. She is hemodynamically stable. Which of the following is the most appropriate next step in management?

a. Aspirin and benzathine penicillin G prophylaxis

b. Azithromycin for 5 days
c. Diuretics and ACE inhibitors immediately
d. High-dose oral prednisolone for 4 weeks
e. IV methylprednisolone pulse therapy for 3 days

48. A 15-year-old boy had an episode of acute rheumatic fever (ARF) two years ago, presenting with arthritis and carditis. His carditis resulted in residual mild mitral regurgitation, which persists on his most recent echocardiogram. He has had no recurrences since the initial episode. He receives benzathine penicillin G every 4 weeks and is otherwise healthy. What is the most appropriate duration of secondary prophylaxis for this patient?

a. 05 years or until age 18 (whichever is longer)
b. 10 years or until age 21(whichever is longer)
c. 10 years or until age 40 (whichever is longer)
d. Continue lifelong prophylaxis
e. Stop prophylaxis now, as he is asymptomatic

49. A 42-year-old woman with a known history of rheumatic mitral stenosis presents with progressive dyspnea on exertion and decreased exercise tolerance over 6 months. On examination, her pulse is irregularly irregular at 110/min. Jugular venous pressure is normal. Auscultation reveals a loud S1 and a diastolic rumbling murmur at the apex. Echocardiogram shows mitral valve area: 0.9 cm^2, mobile leaflets, no left atrial thrombus, mild pulmonary hypertension, and no mitral regurgitation. What is the most appropriate next step in management?

a. Begin long-term anticoagulation
b. Elective closed mitral commissurotomy
c. Percutaneous balloon mitral valvotomy
d. Refer for mitral valve replacement surgery
e. Start high-dose loop diuretics and rate-control therapy

50. A 55-year-old man with long-standing degenerative mitral regurgitation presents for routine follow-up. He reports mild exertional dyspnea but denies orthopnea. On examination, he has a pansystolic murmur at the apex radiating to the axilla. No signs of heart failure are present. His echocardiogram shows severe MR with a left ventricular ejection fraction of 50%. What is the most appropriate next step in management?

a. Annual echocardiography
b. Anticoagulation and monitor for atrial fibrillation
c. Refer for surgical mitral valve repair
d. Start ACE inhibitors and beta-blockers
e. Start diuretics and beta blockers

51. A 68-year-old man with known aortic stenosis presents with worsening exertional dyspnea over the last 3 months. He now becomes breathless after climbing a single flight of stairs.

He also reports occasional dizziness but no syncope. Echocardiogram shows aortic valve area: 0.7 cm^2 and left ventricular ejection fraction of 55%. What is the most appropriate next step in management?

a. Begin beta-blocker therapy and review in 3 months
b. Offer transcatheter aortic valve implantation (TAVI)
c. Schedule surgical aortic valve replacement
d. Start ACE inhibitor therapy and restrict physical activity
e. Start diuretics and review annually

52.A 52-year-old man presents to the emergency department with a sudden onset of severe dyspnea and chest discomfort. *He has a history of poorly controlled hypertension but no known valvular disease. On examination, he is in acute distress, with a respiratory rate 34/min, BP 90/55 mmHg, and pulse 128/min. He has cool extremities, bibasal crackles, and a soft early diastolic murmur at the left sternal border. Bedside echocardiography shows severe acute aortic regurgitation. Which of the following is the most appropriate immediate management?*

a. Begin high-dose IV diuretics and manage conservatively
b. Begin long-term vasodilator therapy and schedule outpatient valve replacement
c. Start IV beta-blockers to reduce heart rate and improve diastolic filling
d. Start IV nitroprusside and delay intervention until symptoms improve
e. Urgently refer for emergency aortic valve surgery

53.A 47-year-old man with native mitral valve infective endocarditis due to Staphylococcus aureus has been on appropriate IV antibiotics for 5 days. He continues to have fevers and appears increasingly dyspneic. Examination shows a new pansystolic murmur at the apex and bibasal crackles. The blood cultures are persistently positive after 72 hours, and the echocardiogram shows a 1.6 cm vegetation on the mitral valve. Which of the following is the most appropriate next step?

a. Add a second bactericidal agent
b. Add ACE inhibitor and diuretic
c. Begin anticoagulation to reduce embolic risk
d. Continue the same antibiotics for the next 1 week
e. Refer urgently for early surgical intervention

54.A 58-year-old man with a history of rheumatic mitral valve disease presents with fever for 2 weeks, night sweats, and unintentional weight loss. He reports intermittent chills and generalized weakness. On

examination, the temperature is 38.2°C. He has a pansystolic murmur at the apex and mild splenomegaly. The echo shows vegetation on the mitral valve. Three sets of blood cultures are all positive for Streptococcus sanguinis. What is the most appropriate diagnosis?

a. Definite infective endocarditis
b. Marantic endocarditis
c. Possible infective endocarditis
d. Rheumatic fever relapse
e. Subacute bacterial myocarditis

55. A 34-year-old woman with severe rheumatic mitral stenosis is scheduled for elective valve replacement. She has no significant comorbidities. Her echocardiogram confirms a severely calcified valve unsuitable for repair. She is otherwise healthy, adherent to medications, and has good access to INR monitoring. She states she is comfortable with long-term medication if it prevents future surgeries. Which type of valve prosthesis is most appropriate for her?

a. Bioprosthetic valve, as it avoids anticoagulation
b. Bioprosthetic valve, because it has superior long-term durability in young patients
c. Bioprosthetic valve, because she is a woman of childbearing age
d. Mechanical valve, because it carries no risk of thromboembolism
e. Mechanical valve, due to her young age and ability to maintain anticoagulation

56. A 68-year-old woman presents for routine follow-up. She has a history of hypertension and type 2 diabetes mellitus, both well controlled. She reports no prior stroke or TIA. Her ECG shows atrial fibrillation. She has no history of bleeding or anticoagulant contraindications. Which of the following is the most appropriate strategy based on current guidelines?

a. Dual antiplatelet therapy (aspirin + clopidogrel)
b. No antithrombotic therapy is needed
c. Start low-dose aspirin for stroke prevention
d. Start rivaroxaban only if she develops symptoms
e. Start warfarin or a direct oral anticoagulant (DOAC)

57. A 72-year-old man with hypertension and stable ischemic heart disease presents with recent-onset atrial fibrillation of 24 hours duration. He reports mild palpitations but no chest pain, dyspnea, or syncope. Examination: BP 132/78 mmHg, pulse 115/min, regularly irregular. ECG confirms AF. Echocardiogram shows normal LV function and no significant valvular disease. Which of the following is the most appropriate initial management strategy?

a. Begin rate-control therapy with beta-blocker and anticoagulation
b. Observe without treatment; AF will resolve spontaneously
c. Proceed with urgent electrical cardioversion without anticoagulation
d. Start digoxin monotherapy and avoid anticoagulation
e. Start long-term amiodarone to maintain sinus rhythm

58. A 28-year-old woman presents to the emergency department with sudden onset palpitations, lightheadedness, and mild shortness of breath for the past 30 minutes. She has no history of structural heart disease or syncope. On examination: BP 118/72 mmHg, HR 190/min, regular; otherwise unremarkable. ECG shows a narrow QRS tachycardia at 190 bpm with no visible P waves. Which of the following is the most appropriate initial management?

a. Administer IV adenosine after attempting vagal maneuvers
b. Begin IV amiodarone infusion
c. Immediate synchronized electrical cardioversion
d. Observe; most episodes resolve spontaneously without intervention
e. Start oral beta-blocker and discharge home

59. A 30-year-old man presents with recurrent episodes of paroxysmal palpitations over the past 2 years, occurring 2–3 times per month. Episodes are usually abrupt in onset, last 10–30 minutes, and resolve spontaneously. He has no history of structural heart disease. ECG during an episode shows AV nodal reentrant tachycardia. Vagal maneuvers sometimes terminate the episodes. Which of the following is the most appropriate long-term management?

a. Continue only with vagal maneuvers as needed
b. Daily oral amiodarone for 6 months
c. Daily oral beta-blocker or calcium channel blocker
d. Immediate referral for urgent surgical ablation
e. Implant a permanent pacemaker

60. A 62-year-old man with a history of prior myocardial infarction presents to the emergency department with sudden-onset palpitations, dizziness, and chest discomfort. On examination: BP: 90/60 mmHg; Pulse: 160 bpm, regular; Respiratory rate: 20/min. He is alert but anxious. ECG shows a wide-complex regular tachycardia, consistent with monomorphic ventricular tachycardia. What is the most appropriate immediate management?

a. Administer IV adenosine
b. Give IV amiodarone bolus followed by infusion
c. Observe and repeat ECG after 15 minutes
d. Perform immediate synchronized electrical cardioversion
e. Start IV lidocaine

61. A 58-year-old man with a history of anterior wall myocardial infarction presents for follow-up after an episode of sustained monomorphic VT treated successfully with IV amiodarone in the emergency department. His echocardiogram shows a left ventricular ejection fraction of 30% and anteroapical akinesia. He is currently stable, on optimal medical therapy for heart failure. Which of the following is the most appropriate long-term management to reduce the risk of sudden cardiac death?
a. Catheter ablation
b. Daily oral amiodarone
c. Dual-chamber permanent pacemaker
d. Implantable cardioverter-defibrillator
e. Long-term beta-blocker

62. A 72-year-old man presents with a 3-month history of fatigue and reduced exercise tolerance. His pulse is 38/min, regular. Blood pressure is 130/70 mmHg, and he is otherwise stable with no syncope. ECG shows complete (third-degree) atrioventricular block with AV dissociation and a narrow-complex junctional escape rhythm at 38/min. The echocardiogram is normal. No reversible causes are found. What is the most appropriate long-term management?
a. Implant a permanent dual-chamber pacemaker
b. Implant a temporary transvenous pacing wire until symptoms improve
c. Observe and follow up in 3 months
d. Start oral beta-blocker therapy
e. Start oral theophylline to increase heart rate

63. A 55-year-old man with newly diagnosed essential hypertension presents for follow-up. His average home blood pressure readings over 2 weeks are 152–158 / 92–96 mmHg. He has no diabetes, no kidney disease, and no cardiovascular disease. His BMI is 31 kg/m², ECG is normal, and baseline labs, including renal function and electrolytes, are within normal range. Which of the following is the most appropriate initial long-term management?
a. Begin low-dose aspirin alongside an ACE inhibitor
b. Lifestyle modification only, with no pharmacologic therapy
c. Start a thiazide-type diuretic or an ACE inhibitor
d. Start a combination of an ACE inhibitor and a beta-blocker
e. Start spironolactone as first-line monotherapy

64. A 60-year-old man with long-standing poorly controlled hypertension presents with severe headache, nausea, and confusion for 2 hours. Blood pressure is 228/132 mmHg. Examination shows papilledema. He is disoriented

but has no focal neurological deficits.

Urinalysis shows 2+ protein and microscopic hematuria. CT brain shows no evidence of intracranial hemorrhage or infarction. Which of the following best supports the diagnosis of a hypertensive emergency?

a. Severely elevated BP with dizziness only
b. Severely elevated BP with encephalopathy
c. Severely elevated BP with headache and anxiety
d. Severely elevated BP with no symptoms
e. Severely elevated BP with normal fundoscopy

65. A 28-year-old man presents with newly diagnosed hypertension. His clinic blood pressure averages 165/100 mmHg on repeated measurements. Laboratory tests show serum potassium: 3.1 mEq/L, serum sodium: 145 mEq/L and normal renal function. He has no history of diuretic use. Examination is unremarkable. Which of the following is the most appropriate initial investigation to evaluate for primary hyperaldosteronism?

a. 24-hour urinary cortisol estimation
b. CT scan of the adrenal glands
c. Plasma aldosterone-to-renin ratio
d. Plasma metanephrine level
e. 24-hour urinary aldosterone level

66. A 1 hour old neonate born at 35 weeks of gestation diagnosed prenatally with TOF is severely cyanosed. CXR shows oligaemic lung fields. The baby should be treated with a medication producing which of the following effects?

a. Decreased left ventricular end diastolic pressure
b. Increased pulmonary surfactant levels
c. Increased pulmonary vascular resistance
d. Maintenance of ductus arteriosus patency
e. Stimulation of fetal hemoglobin production

67. A 13 year old girl is brought to the physician by her parents due to restlessness and involuntary jerking. Her birth, developmental and drug history are normal and her vaccinations are up to date. There is no significant history other than sore throat 4 months back. On examination, the patient has rapid, irregular jerking movements involving her mouth, arms, and legs. This patient is at greatest risk for developing which of the following conditions?

a. Deforming polyarthritis
b. Early dementia
c. Parkinson disease
d. Renal failure
e. Valvular heart disease

68. A 6 days old neonate is brought to the paeds cardiology department with the chief complaint of cyanosis since birth, Spo2 in air is 65% echocardiogram shows the origin of the aorta lying anterior and to the right

of the pulmonary artery. Which embryological process is defective resulting in the Echocardiography findings?

a. Fusion
b. Obliteration
c. Proliferation
d. Septation
e. Spiraling

69. **Mark the option with the correct physical examination findings associated with the diagnosis.**

a. Loud second heart sound - TGA
b. Harsh ejection systolic murmur 2nd left ICS soft P2 – perimembranous VSD
c. Grade 2 ejection systolic murmur 2nd left ICS with wide fixed splitting of S2 – Patent ductus arteriosus
d. Grade 3 continuous murmur left 2nd ICS infraclavicular region – Tetralogy of fallot with ASD
e. Grade 4 pansystolic murmur left sternal border 4th ICS – Atrial septal defect

70. **The murmur of Hypertrophic cardiomyopathy with left ventricular outflow obstruction**

a. Increases with squatting and strain phase of valsalva
b. Decreases with squatting and strain phase of valsalva
c. Decreases with squatting and increases with strain phase of valsalva
d. Increases with abrupt standing and decreases with strain phase of valsalve
e. Decreases with abrupt standing and increases with strain phase of valsalva

71. **A 3-month-old infant is diagnosed with Tetralogy of Fallot. Which echocardiographic finding apart from normal arch anatomy is most commonly associated with this condition?**

a. Aortic arch coursing to the left of the trachea with the first head-and-neck vessel arising to the right
b. Aortic arch coursing to the right of the trachea with the first head-and-neck vessel arising on the left
c. Two aortic arches forming a complete vascular ring
d. Left-sided aortic arch with an aberrant right subclavian artery
e. Interrupted aortic arch distal to the left subclavian artery

72. **A 13-year-old child with a history of rheumatic fever 3 years ago presents for follow-up. She had mild mitral regurgitation on echocardiography in her first presentation and echo now is normal with no mitral regurgitation. She receives monthly intramuscular benzathine penicillin for secondary prophylaxis.According to current guidelines, how long should secondary prophylaxis be continued in this patient?**

a. 20 yrs of age
b. 21 years of age
c. Lifelong
d. 18 yrs of age
e. 40 yrs of age

73. **A 2 yr old boy presented with poor feeding and lethargy for 2 days. On examination the pt is drowsy, tachypneic with capillary refill time of 5 seconds and feeble**

pulse. The monitor shows a heart rate of 230 beats per minute. You decide to do a 12 lead ECG, that shows narrow complex tachycardia with regular rythm and absent P waves. You diagnose the patient as having SVT. What will be the treatment of choice?

a. Inj Adenosine IV stat
b. Carotid massage
c. Cold packs to the face
d. Synchronised DC cardioversion
e. Inj Amiodarone IV stat

74. A 3 years old child came to ER with 7 days of history of cough and low grade fever. Now He is having increasing breathing difficulty for last 2 days .O/E ; Afebrile ,Pale with weak Pulses . R/R 50/Minute Heart rate 130/Minute, Muffled heart sounds and Hepatomegaly. x ray chest shows cardiomegaly.What is the most likely diagnosis?

a. Infective endocarditis
b. Myocarditis
c. Pericarditis
d. Infective Endarteritis
e. Bronchitis

75. A five days Neonate was brought to neonatal unit for severe cyanosis which didn't improve with 100 % oxygen inhalation for 10 Minutes and the saturation remained the same. Chest is clear.What will be your therapeutic action?

a. iv antibiotics
b. iv Prostaglandins
c. iv indomethacin
d. iv Lasix
e. put him on ventilator

76. A 40 days old infant was presented with tachyponea and feeding difficulty. There is pan systolic murmur on auscultation. What investigation would you consider 1st .

a. CBC
b. ABGs
c. X ray chest
d. ECG
e. Echo

77. When will be cyanosis clinically apparent?

a. when respiratory rate is More than 60 / minute
b. when heart rate is less than 60 /minute
c. when GCS is 13
d. when amount of reduced haemoglobin is More than 5 g %
e. When Hb is less than 10 g/dl.

78. A 12 years old boy is having headache and history of palpitation on exertion. On precordial examination there is systolic murmur. On GPE you noted absent femoral pulses. What other sign will you look for?

a. Hepatomegaly
b. Splenomegaly
c. Four Limbs BP
d. Radiation of murmur to the neck
e. Character of the pulse

79. A 7 years old Girl presented with history of sore throat 3 weeks back. Now she is having swollen and tender right ankle joint for last 3 days. She also had left knee arthritis 7 days back which was improved after 3 days. On auscultation there is pan systolic murmur on mitral

area.What is the most likely diagnosis?

a. Infective endocarditis
b. Myocarditis
c. Pericarditis
d. Juvenile idiopathic arthritis
e. Rheumatic fever

80. What type of pulses would you expect to find in PDA?

a. Pulsus Bigeminus
b. Pulsus Paradoxus
c. Pulsus Bisferiens
d. Pulsus Dicroticus
e. Water Hammer Pulse

81. What is the most common cyanotic congenital disease ?

a. VSD with PS
b. Severe PS
c. TOF
d. Pulmonary atresia
e. Epstein anomaly

82.A newborn presents with central cyanosis and a single loud second heart sound. What is the most likely diagnosis?

a. Tetralogy of Fallot
b. Transposition of the Great Arteries
c. Ventricular Septal Defect
d. Atrial Septal Defect
e. Patent Ductus Arteriosus

83.In a 5-year-old child, a continuous machine-like murmur is heard best at the left infraclavicular area. What congenital heart defect is most likely present?

a. Patent Ductus Arteriosus
b. Aortic Stenosis
c. Ventricular Septal Defect
d. Atrial Septal Defect
e. Coarctation of Aorta

84.A 12 year old athletic boy presents with exertional dyspnea and a systolic murmur heard best at the left lower sternal border. What condition is most likely causing these symptoms?

a. Dilated Cardiomyopathy
b. Hypertrophic Cardiomyopathy
c. Restrictive Cardiomyopathy
d. Ventricular Septal Defect
e. Atrial Septal defect

85.A 2 month patient with history of cough and fever presents with of sudden onset palpitations with a regular, rapid heart rate. The ECG shows a narrow QRS complex tachycardia. What is the likely diagnosis?

a. Atrial Fibrillation
b. Ventricular Tachycardia
c. Supraventricular Tachycardia
d. Atrial Flutter
e. Sinus tachycardia

86.Which of the following is a major Duke criterion for the diagnosis of infective endocarditis?

a. Splinter hemorrhages
b. Roth spots
c. Osler nodes
d. Janeway lesions
e. New Valvular Regurgitation

87.A 10-year-old child presents with fever and joint pain following a recent throat infection. On examination, there is erythema marginatum. What is the likely diagnosis?

a. Kawasaki Disease
b. Systemic Lupus Erythematosus
c. Rheumatic Fever
d. Henoch-Schönlein Purpura

e. Infective Endocarditis

88.A newborn causes severe cyanosis, respiratory distress, and a right-sided aortic arch. What is the most probable diagnosis?

a. Tetralogy of Fallot
b. Transposition of the Great Arteries
c. Truncus Arteriosus
d. Total Anomalous Pulmonary Venous Return
e. Atrial Septic Defect

89.A 6-year-old child with recurrent history of respiratory tract infection and poor weight gain has pansystolic murmur best heard at the left lower sternal border. What is the likely diagnosis?

a. Ventricular Septal Defect
b. Atrial Septal Defect
c. Patent Ductus Arteriosus
d. Aortic Stenosis
e. Coarctation of aorta

90.A 2 month old baby presents with 4 days history of cough, fever, respiratory distress. On examination theres tachycardia and distant heart sound. Ecg shows low voltage complexes. What is the confirmatory testof this condition?

a. Cardiac MRI
b. Echocardiography
c. Heart enzymes
d. Chest X-rays
e. Endomyocardial Biopsy

91.A 30-year-old lady is 7 days postnatal who presented with pain and swelling of the left leg. 2 days later she presented to the emergency department with shortness of breath, blood-stained sputum and palpitations. On examination she is having tachycardia and normal temperature. ECG shows right axis deviation. The most likely diagnosis in this patient is:

a. Pneumonia.
b. Acute pulmonary edema.
c. Pulmonary embolism
d. Acute respiratory distress syndrome.
e. Acute severe asthma.

92.A 40-year-old man presented with 5 days history of pain right side of the chest which increases with inspiration. He also complains of fever with chills and cough with blood-stained sputum. Which one of the following is the most likely diagnosis in this patient?

a. Acute myocardial infarction.
b. Community acquired pneumonia
c. Pericarditis
d. Acute bronchitis.
e. Pulmonary embolism

93. A 56-year-old smoker man presented with 3 months history of productive cough exertional dyspnea and blood-streaked sputum. He has anorexia and 3-5 kg weight loss during this period. Clinical examination shows early clubbing and auscultation revealed crepitations in the right upper zone. Which one of the following is the most likely diagnosis?

a. Chronic obstructive pulmonary disease

b. Pulmonary tuberculosis
c. Interstitial lung disease
d. Bronchogenic CA
e. Bronchiectasis

94. 28-year-old women presented with 3 months history of right-side chest pain, cough, fever and weight loss. Further clinical evaluation revealed right side pleural effusion. On diagnostic aspiration a straw-colored fluid was aspirated. Which one of the following is the most appropriate test from the fluid to order?
a. Cytology for malignant cells
b. Gene expert for tuberculosis
c. Culture for tuberculosis
d. Culture for septic infection
e. Biochemistry for LDH

95. A 37-year-old farmer presented with one week history of high-grade fever, right side chest pain which increases on inspiration and cough. On examination his temperature is 102oF, pulse rate is 120/min and respiratory rate is 20/min. auscultation shows bronchial breathing on the right lower chest. Which of the following is the most likely diagnosis?
a. Community acquired pneumonia
b. Acute pleural effusion
c. Acute bronchitis
d. Farmer's lung
e. Lung abscess

96. A 15-year-old boy presents with recurrent episodes of cough, chest tightness, and wheezing, particularly at night and after exercise. There is no fever or sputum production. Between episodes, he remains asymptomatic. On examination, chest is clear and spirometry is normal at present. What is the most likely diagnosis?
a. Respiratory syncytial virus infection
b. Exercise-induced bronchospasm
c. Early episodic asthma
d. Allergic rhinitis
e. Acute bronchitis

97. A 14-year-old girl complains of recurrent episodes of dry cough and wheezing, mainly at night and after exposure to dust. Her physical examination is normal between attacks. Spirometry at rest is normal. Which of the following investigations is most useful to confirm the diagnosis of asthma?
a. Chest X-ray
b. Peak flow rate
c. Serum IgE levels
d. CT scan of chest
e. Spirometry

98. A 15-year-old boy has asthma symptoms less than once a week, no nighttime symptoms, and normal spirometry between attacks. What is the most appropriate initial management?
a. Daily low-dose inhaled corticosteroid
b. Short-acting β_2-agonist as needed
c. C Long-acting β_2-agonist (LABA) as needed.
d. Montelukast daily
e. Oral theophylline daily

99. Which of the following findings is most characteristic

of post-primary (reactivation) pulmonary tuberculosis?

a. Lower lobe infiltrates with pleural effusion
b. Diffuse miliary nodules both lungs
c. Cavitary lesion in the upper lobe
d. Bilateral Reticulonodular shadows
e. Hilar lymphadenopathy.

100. A 55-year-old man presents with progressive shortness of breath and dry cough for 6 months. On examination, fine end-inspiratory crackles are heard at both lung bases and clubbing is present. High-resolution CT (HRCT) shows subpleural reticulation and honeycombing, predominantly in the lower lobes. Which of the following is the most likely diagnosis?

a. Nonspecific interstitial pneumonia
b. Idiopathic pulmonary fibrosis
c. Hypersensitivity pneumonitis
d. Chronic pulmonary edema
e. Sarcoidosis

101. A 22-year-old man presented with 2 months' history of productive cough with blood-stained sputum. He has low grade fever and weight loss for the same period. He has positive tuberculous contact history.Which one of the following is the most specific test for diagnosis of this patient?

a. Mantuox test.
b. X ray chest.
c. Sputum for AFB
d. ESR
e. CT scan chest

102. A 23-year-old women presented with recurrent shortness of breath and audible wheezes in the chest for the last 10 years. For the last two days, she presented with severe breathlessness and cough. She is not able to complete her sentences. Her respiratory rate is 25/min. Chest examinations shows silent chest on the bases and wheezes in the upper zones. Her oxygen saturation is 92% in the room air. Which one of the following is the most appropriate immediate test she needs?

a. Arteria blood gases
b. Spirometry
c. X ray chest
d. Peak flow metery
e. Pulse oximetry

103. A 56-year-old farmer is complaining of shortness of breath and wheezes in the chest mostly after returning from the fields. He is having positive history of pulmonary tuberculosis in his one daughter who is married. Examination shows, otherwise normal built, no clubbing or cyanosis. Chest examination shows few scattered wheezes. X ray chest is normal. Which one of the following is the most likely diagnosis?

a. Extrinsic allergic alveolitis
b. Early pulmonary edema
c. Early pulmonary TB
d. Episodic asthma
e. COPD

104. A 16-year-old boy presented with 3 weeks' history of left sided chest pain which increases with deep inspiration. X ray chest PA

view shows left side pleural effusion. His pleural tap was done which shows the following results: Protein-3.3gm/dl, glucose-47mg%, total cells-176/cmm, 80% lymphocytes, 13% neutrophils, and 7% RBCs. Which one of the following is the most likely diagnosis?

a. Pulmonary tuberculosis
b. Para pneumonic effusion
c. Pleural tuberculosis
d. Mesothelioma
e. Viral pleurisy

105. A 36-year-old lady presented with 3 weeks' history of purulent foui smell sputum, fever, weight loss and anorexia. She has been treated for pneumonia with some antibiotic but partial improvement. Her chest x ray shows a cavity with air fluid level in the right apex. Which one of the following is the most appropriate further investigation she needs?

a. Sputum septic culture
b. Sputum for AFB
c. CT scan chest
d. Bronchoscopy
e. CBC & ESR

106. A 22 years old man who is a known case of asthma, was brought to the emergency department with severe shortness of breath and sweating. He cannot speak properly because of shortness of breath. Respiratory rate is about 30/mint. Heart rate is about 120/mint. His temperature is 99o F. On auscultation of the chest, there are bilaterally decreased breath sounds with few inspiratory and expiratory wheezes. Which one of the following is the first priority in his management?

a. 100% oxygen inhalation
b. 28% oxygen inhalation
c. Immediate IV antibiotics
d. Immediate IV steroids
e. Ipratropium nebulization

107. A 35 years old lady who is 5 days postnatal, presented with 3 days' history of shortness of breath, dry cough and palpitation. She had an episode of blood in the sputum 2 days back. On examination, she is afebrile and tachycardia. Clinical examination of the chest is normal. ECG shows heart rate of 130/min, prominent P waves and right axis deviation. Which one of the following is the most likely diagnosis?

a. Post-partum cardiomyopathy
b. Pulmonary embolism
c. Pulmonary edema
d. Post-partum sepsis
e. Postpartum psychosis

108. A 16 years old boy presents with dry cough and feeling of tightness in the chest during playing for the last 1 year. His father was smoker and diabetic who died of acute myocardial infarction 2 years back. Clinical examination shows congestion in the nose with a normal chest examination. His X ray chest is normal. Which of the following investigation is most appropriate for diagnosis?

a. High resolution CT scan
b. PEEK expiratory flow rate

c. Exercise tolerance test
d. Electrocardiography
e. Lipid profile.

109. A 65 years old women is having recurrent chest infection because of post tuberculous bronchiectasis. Which one of the following is the best strategy to decrease the frequency of recurrent infection in her?
a. Antibiotics before procedures
b. Pneumococcal vaccination
c. Influenza vaccination
d. Chest physiotherapy
e. Regular antibiotics

110. A 54-year-old smoker presented with 3 weeks' history of productive cough, blood tinged sputum, hoarseness of voice and anorexia. He has dry cough for long time but without hoarseness. He has bilateral wheezes and occasional crept on the chest auscultation. X ray chest shows left apical shadow. Which one of the following is the most appropriate further investigation?
a. High resolution CT scan
b. Sputum for AFB
c. CT Scan chest
d. Laryngoscopy
e. MRI brain stem

111. A 40-year-old man presented with 5 days history of pain right side of the chest which increases with inspiration. He also complains of fever with chills and cough with blood-stained sputum. Which one of the following is the most likely diagnosis in this patient?
a. Acute myocardial infarction.
b. Community acquired pneumonia
c. Pulmonary embolism
d. Acute bronchitis.
e. Pericarditis

112. A 30-year-old lady is 7 days postnatal who presented with pain and swelling of the left leg. 2 days later she presented to the emergency department with shortness of breath, blood-stained sputum and palpitations. On examination she is having tachycardia and normal temperature. ECG shows right axis deviation. The most likely diagnosis in this patient is:
a. Acute respiratory distress syndrome.
b. Post-natal cardiomyopathy
c. Acute pulmonary edema.
d. Acute severe asthma.
e. Pulmonary embolism

113. A 40 years old man presented 5 days' history of pain right side of the chest which increases with inspiration. He also complains of fever with chills and cough with blood stained sputum. X ray chest shows consolidation right middle zone. Which one of the following is the most appropriate drug for this patient?
a. Narcotic Analgesics
b. Doxycycline
c. Moxifloxacin
d. Artesunate
e. Ceftriaxone

114.A 50 years old lady presented with 6 years' history of recurrent productive cough and occasionally blood in the sputum. She had past history of pulmonary tuberculosis 10 years back and has taken full course of anti-tuberculous drugs. On examination, she has clubbing and bilateral coarse crepitations on auscultation.
Which one of the following is the most sensitive test for this patient?

a. Sputum for culture and sensitivity.
b. High resolution CT scan chest
c. CT chest with contrast
d. Sputum for AFB.
e. X ray chest.

115.A 20 years old lady presented with two months' history of low grade fever and right sided chest pain which increases with inspiration. Clinical examination shows a pale and wasted lady with dull percussion note and decreased breath sounds on the right side lower chest.Which one of the following is the most likely diagnosis?

a. Pleural effusion due to mesothelioma.
b. Hemothorax due to bronchogenic carcinoma.
c. Pleural effusion due to tuberculosis
d. Pneumothorax due to tuberculosis.
e. Lung abscess

116. A 22-year-old tall, thin male with no significant past medical history presents with sudden onset sharp right-sided chest pain and shortness of breath while resting. He is a non-smoker. Chest X-ray shows air in the pleural space without lung disease. What is the most likely cause?

a. COPD
b. Tuberculosis
c. Rupture of subpleural blebs
d. Lung cancer
e. Pulmonary embolism

117. A 60-year-old chronic smoker presents with shoulder pain radiating to the arm and ptosis, miosis, and anhidrosis on the right side. Imaging reveals a superior sulcus (Pancoast) tumor. Horner's syndrome is due to involvement of which structure?

a. Recurrent laryngeal nerve
b. Stellate ganglion
c. Phrenic nerve
d. Brachial plexus
e. Intercostal nerves

118.A 48-year-old postoperative patient develops acute pleuritic chest pain and dyspnea. He is tachycardic but hemodynamically stable. What is the initial diagnostic test of choice?

a. Chest X-ray
b. V/Q scan
c. CT pulmonary angiography
d. Echocardiography
e. Lower limb Doppler

119. A trauma patient suddenly becomes hypotensive,

tachycardic, and severely dyspneic. Trachea is shifted to the left and there is no air entry on the right. What is the best emergency treatment?

a. High-flow oxygen
b. Needle decompression 4th ICS
c. Needle decompression 2nd ICS MCL
d. Emergency thoracotomy
e. Chest tube only

120. A 45-year-old man presents with severe chest pain after repeated vomiting following alcohol binge. CT chest shows mediastinal air consistent with esophageal rupture. Where does spontaneous perforation most commonly occur?

a. Upper esophagus
b. Mid thoracic esophagus
c. Lower posterolateral esophagus
d. Cervical esophagus
e. GE junction